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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,001	10/17/2001	John D. Doyle	EMPIR-030AUS	5503
22494	7590	11/02/2004	EXAMINER PHAM, TUAN	
DALY, CROWLEY & MOFFORD, LLP SUITE 101 275 TURNPIKE STREET CANTON, MA 02021-2310			ART UNIT 2643	PAPER NUMBER

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,001

Applicant(s)

DOYLE ET AL.

Examiner

TUAN A PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1- 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Sproat et al. (U.S. Patent No.: 6,778,503, hereinafter, "Sproat").

Regarding claim 1, Sproat teaches a method of providing a multiple interface system (see figure 2) comprising the steps of:

providing a first module having a first physical telecommunication interface and running a first telecommunications protocol (see figure 2, TDM framer/cellifier module 201, T1 protocol, col.8, ln.23-56),

providing a second module having a second physical telecommunication interface, the second physical interface being different from the first physical telecommunication interface, the second module running the first telecommunication protocol (see figure 2, figure 8, monitoring processor module 203, T1 protocol, col.8, ln.1-13, col.9, ln.1-24); and

sharing a resource from the second module with the first module (see figure 2, col.8, ln.48-56).

Regarding claim 2, Sproat further teaches the first physical telecommunications interface and the second physical telecommunications interface are selected from the group consisting of T1, E1, T3 and E3 (see col.8, ln.64-65).

Regarding claim 3, Sproat further teaches the resource comprises a digital signal processor (DSP) (see col.8, ln.25-33).

Regarding claim 5, Sproat further teaches the step of providing a communications path between the first module and second module (see figure 2, col.8, ln.1-13).

Regarding claim 6, Sproat further teaches the step of changing a configuration of the system from one associated with the first physical telecommunications interface to one associated with the second physical telecommunications interface (see 10, ln.1-23).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sproat et al. (U.S. Patent No.: 6,778,503, hereinafter, "Sproat") in view of Katz et al. (U.S. Patent No.: 6,343,086, hereinafter, "Katz").

Regarding claim 7, Sproat teaches a method of providing a multiple interface system (see figure 2) comprising the steps of:

providing a first module having a first physical telecommunication interface and running a first telecommunications protocol (see figure 2, TDM framer/cellifier module 201, T1 protocol, col.8, ln.23-56),

Art Unit: 2643

providing a second module having a second physical telecommunication interface, the second physical interface being different from the first physical telecommunication interface, the second module running the first telecommunication protocol (see figure 2, figure 8, monitoring processor module 203, T1 protocol, col.8, ln.1-13, col.9, ln.1-24); and

sharing a resource from the second module with the first module (see figure 2, col.8, ln.48-56).

It should be noticed that Sproat fails to clearly teach the step of making the interface channels appear contiguous across the first physical telecommunications interface and the second physical telecommunications interface. However, Katz teaches such features (see figure 2, card 1, card 2, col.3, ln.35-49) for a purpose of easily connecting both cards together.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of making the interface channels appear contiguous across the first physical telecommunications interface and the second physical telecommunications interface, as taught by Katz, into view of Sproat in order to save space and conveniently to install.

Art Unit: 2643

Regarding claim 8, Sproat teaches a method of providing a multiple interface system (see figure 2) comprising the steps of:

providing a first module having a first physical telecommunication interface and running a first telecommunications protocol (see figure 2, TDM framer/cellifier module 201, T1 protocol, col.8, ln.23-56),

providing a second module having a second physical telecommunication interface, the second physical interface being different from the first physical telecommunication interface, the second module running the first telecommunication protocol (see figure 2, figure 8, monitoring processor module 203, T1 protocol, col.8, ln.1-13, col.9, ln.1-24); and

sharing a resource from the second module with the first module (see figure 2, col.8, ln.48-56).

It should be noticed that Sproat fails to clearly teach at least one of the first module and the second module comprise an audio enabled module. However, Katz teaches such features (see figure 2, vocoder board 2, col.3, ln.15-48) for a purpose of providing the voice channels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of at least one of the first module and the second module comprise an audio enabled module, as taught by Katz, into view of Sproat in order to provide the voice system to customer premises.

Art Unit: 2643

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sproat et al. (U.S. Patent No.: 6,778,503, hereinafter, "Sproat") in view of Katz et al. (U.S. Patent No.: 6,343,086, hereinafter, "Katz") as applied to claim 1 above, and further in view of Weller (U.S. Patent No.: 6,662,211).

Regarding claim 9, Sproat and Katz, in combination, fails to clearly teach the first module and the second module utilize Pulse Code Modulated (PCM) audio streams (see col.1, ln.30-37). However, Weller teaches such features (see col.1, ln.25-33) for a purpose of encoding an analog voice signal into a digital bit stream.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the first module and the second module utilize Pulse Code Modulated (PCM) audio streams, as taught by Weller, into view of Sproat and Katz in order to provide different voice channels.

Regarding claim 10, Weller further teaches the PCM audio stream comprises an audio stream selected from the group comprising Mu-law encoded audio and A-law encoded audio (see col.1, ln.25-33).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Mohammadian et al. (U.S. Patent No. 6,738,454), Ryan et al. (U.S. Patent No. 6,516,053), Pickett (U.S. Patent No. 6,744,758), and Bhattacharya (U.S. Patent No. 6,425,100) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method testing telecommunication service installations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

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Art Unit: 2643

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
October 27, 2004
Examiner

Tuan Pham


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600